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Genesee, Fred.

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L'étude vise à évaluer l'efficacité d'un programme d'immersion
française mis sur pied en 1969-1970 et destiné à des élèves anglophones
de septième année. Dans ce but, les performances scolaires (anglais,
français et mathématiques) et les attitudes ethniques d'un échantillon
d'élèves inscrits en 1973-1974 dans des classes d'immersion ont été
comparées à celles de groupes de contrôle: élèves suivant l'enseignement
régulier en anglais, élèves francophones. Le document rend compte des
résultats aux tests de juin 1974 et les compare à ceux obtenus en
février de la même année.

Sur les 240 élèves de février 1974, il en reste 198 en juin,
toujours répartis en quatre groupes: immersion totale (57), immersion
partielle (58), groupes témoins anglais (51) et français (32). Un
cinquième groupe de 39 élèves est venu s'ajouter: ils suivent un
programme d'immersion à l'intérieur d'une école francophone. Les
instruments d'enquête suivants ont été utilisés en juin 1974: des
extraits du "Stanford achievement test", le Test de rendement en
français et le Test de rendement en mathématiques de la CECM, un test de
lecture, un test de compréhension et un test de production orale, enfin
une échelle mesurant les attitudes ethniques des élèves.

Les progrès effectués en français dans les classes d'immersion ont
été substantiels par rapport à la situation dans les classes régulières.
Toutefois, contrairement aux années précédentes et aux résultats de
février 1974, une certaine baisse a été enregistrée en ce qui concerne
la maîtrise de la langue anglaise dans certaines classes d'immersion.
Par ailleurs les résultats de la classe d'immersion située dans une
école française ne se distinguent pas de ceux des autres groupes
d'immersion sauf en ce qui concerne le test de production orale. Il
semble enfin que les élèves des classes d'immersion développent une
attitude plus favorable envers les groupes ethno linguistiques autres que

le leur.

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EVALUATION OF THE 1973-1974 GRADE VII
FRENCH IMMERSION CLASS

June 1974

A report submitted
by the Curriculum Department to
THE PROTESTANT SCHOOL BOARD OF GREATER MONTREAL

by
Fred Genesee
Sandra Morin
Terri Allister

October 1974

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INTRODUCTION

In February 1974, an evaluation of the Grade VII French Immersion class was made. The results of this evaluation are presented in another report "Evaluation of the 1973-74 Grade VII French-Immersion Class--February." The current report presents the findings of a second evaluation of the same group of students undertaken in June 1974, to assess the year-end status of these students as well as to monitor their progress from February to June.

Very briefly, it was found in the first evaluation that, in general, the experimental French-immersion students performed as well as the English Control students on tests of English-language skills, such as vocabulary, spelling, reading and writing. Furthermore, the immersion students displayed a much higher level of competence in French than did the English Control students. The immersion students were, understandably, less competent in French than a control group of francophone students. The immersion group was superior to the English Control group in both the formal aspects of French, such as reading and writing, and in the more informal aspects, such as speaking and listening. A summary of the February results is presented in Appendices 1 and 2.

The June evaluation was carried out following essentially the same procedure and using the same tests as in the first evaluation with the following exceptions: (1) the test of English writing skills was omitted in the June testing; (2) the test of French writing skills was omitted in the June testing; (3) a subjective evaluation of the students' French oral production skills was made in June instead of a detailed phonetic and grammatical analyses as had been done in February, and (4) a standardized test of French listening comprehension was included in the June testing.

TEST BATTERY

The test battery included a battery of English and French language tests as well as an attitude questionnaire:

English-Language Tests

- 1) Reading - subtest of the California Achievement Test-Level 4, Form A (C.A.T.).
- 2) Vocabulary - subtest of the C.A.T., Level 4, Form A.
- 3) Spelling - subtest of the C.A.T., Level 4, Form A. Standardized procedures were used to administer this test unlike in the February evaluation. In other words, the students had to select the one of four written words which was misspelled. There were 32 such items. In the February test, a revised test with 29 items of the misspelled words from the standard test was presented orally to the students who were required to write them down.

French-Language Tests

- 1) Reading - a selection from Video Presse (Vol. 1, No 3) entitled "J'ai parlé, Noa" was read by the students -- the same as in February.
- 2) Test de Rendement en Français (Level V) -- same as that used in February.
- 3) Test de Rendement en Mathématiques, (Level VII) -- same as that used in February.
- 4) French oral production test -- same procedure as used in February.
- 5) Listening comprehension -- the Test de Classement: Français Langue Seconde (1969) published by the Centre Educatif et Culturel Inc. was used. This test consists of 37 items which measure associative and integrative listening skills.

For a more detailed description of those tests which had been used in the February evaluation refer to the February report.

Attitude Assessment

In order to assess the students' attitudes toward themselves and other salient ethnolinguistic groups in their community each student was asked to rate the following concepts --- Myself, French Canadian, American and European French person --- on 18 different evaluative dimensions using a 7-point rating scale. The evaluative dimensions included such items as successful--unsuccessful; friendly --- unfriendly; intelligent--- unintelligent.

THE SAMPLE

All students who had participated in the February evaluation and who were still available for testing in June were included. Very few of the original sample were lost-- see Table 1. On the other hand, there was a very noticeable loss in the students' motivation during this test session as will become evident in the Results section. This is very unfortunate since it makes it difficult to assess the students' progress from February to June.

The sample consisted of the original four groups of students----- Experimental I (French-immersion centres), Experimental II (French-immersion wing schools), English Control and French Control. In addition, a fifth group was tested in June. This group consisted of a sample of students taking the French-immersion option in de Roberval High School. This is the very same French-immersion program as offered in the French-immersion centres and wing schools except that it takes place in an otherwise French-speaking school. This group was included to assess the influence of a French milieu on the acquisition of French as a second language. The approximate size of this sample is also presented in Table 1.

It should be remembered that the original four groups had been categorized and equated as much as possible according to I.Q. I.Q. distinctions were maintained in the June testing. No I.Q. scores were available for the de Roberval Immersion group. Therefore, a random sample of students was taken from this class and the resulting sample probably falls towards the average range in terms of I.Q.

The Experimental I, Experimental II, English Control and de Roberval Immersion groups took all tests, English and French. The French Control group took only the French-language tests. Only the anglophone groups answered the attitude questionnaire.

TABLE I

Sample Size

	<u>Above Average I.Q.</u>	<u>Average I.Q.</u>	<u>Below Average I.Q.</u>
Experimental I	18	19	20
Experimental II	20	18	20
English Control	16	17	18
		<u>Total</u>	
French Control		32	
de Roberval		39	

RESULTS

English-Language Tests

Because the de Roberval group could not be stratified according to I.Q. two separate sets of analyses had to be performed; one, including de Roberval, but ignoring I.Q. distinctions in the other three anglophone groups, and one excluding de Roberval, but distinguishing among the average, above average and below average I.Q. students in the other three anglophone samples.

Therefore, in the first set of analyses three separate two-way analyses of variance were performed on the scores from the reading test, the vocabulary test and the spelling test. The scores that were analyzed were in percentile form. The main variables were School Group (Experimental I, Experimental II, English Control and de Roberval Immersion) and Sex (male and female).

In the second set of analyses, excluding de Roberval, three separate three-way analyses of variance were performed on the scores from the three English tests. The main variables were School Group (Experimental I, Experimental II, and English Control), Sex (male and female) and I.Q. (above average (116+) average (96-115) and below average (95-)). This second set of analyses is particularly important in the analyses of the French-language test results because it provides information about the influence of I.Q. level on second language proficiency.

Reading

A summary of the average percentile scores according to School group is presented in Table 2 and in Table 3 according to I.Q. group.

There was a significant difference between the School groups ($F = 13.21$; $df = 3, 197$; $p < .001$) -- the Experimental I ($\bar{x} = 57.55$) and the English Control group ($\bar{x} = 53.57$) scored significantly higher than both the Experimental II ($\bar{x} = 29.96$) and the de Roberval Immersion group ($\bar{x} = 30.95$).

In the February evaluation, it had been found that the Experimental I Group ($\bar{x} = 66.28$) scored higher than both the Experimental II ($\bar{x} = 50.30$) and the English Control Group ($\bar{x} = 49.33$). Thus, there has been a very sizeable decrement in performance on the part of both the Experimental I and II groups while the English Control group has shown some improvement. In the present evaluation it is difficult to account for the discrepancy between the Experimental I group and the other two immersion groups ---- de Roberval and the Experimental II group. It is not likely that I.Q. is a factor since I.Q. levels were equated, at least between the Experimental I and II groups.

There was also a significant difference between I.Q. groups ($F = 11.30$; $df = 2, 148$; $p < .001$) -- as expected the rank order from highest to lowest was the above average group ($\bar{x} = 52.30$), average ($\bar{x} = 39.62$) and below average ($\bar{x} = 27.48$). When the June averages are compared to the February averages (see Appendix 1) it is evident that there has been an overall decline in performance. It is the author's personal opinion that this decrement can be explained in large part by a lack of motivation. The students appeared to be less motivated because, first of all, they had already taken the tests, and, secondly, the second testing was done at the end of the school year which happened to be particularly hot and humid.

There was no significant sex difference, nor were there any significant interactions.

Table 2

Summary of Results According to School Group

	Exp'tal I	Exp'tal II	de Roberval	Eng. Ctrl	Fr. Control	F value	p. value
<u>ENGLISH-LANGUAGE TESTS</u>							
Reading	57.55	29.96	50.95	53.57		13.21	<.001
Spelling	65.12	41.80*	48.50	49.70		5.79	<.001
Vocabulary	68.49	46.28	46.40	62.65		7.91	<.001
<u>FRENCH-LANGUAGE TESTS</u>							
Reading	9.11	7.74	8.26	5.45	11.60	7.76	<.001
Test de Rend en Français							
-raw score	19.21	13.01	17.76	9.49	28.92	68.86	<.001
-stanine	4.56	2.96	4.73	2.02	7.7	108.79	<.001
Test de Rend en Mathématiques							
-raw score	21.32	18.93	18.56	13.45	19.76	10.02	<.001
-stanine	5.80	5.10	5.65	3.35	5.75	13.38	<.001
Listening Comprehension	28.57	20.57	25.52	17.61	33.09	16.05	<.001
Oral Production							
-Comprehension	4.26	3.92	4.80	2.31	5.00	51.05	<.001
-Pronunciation	3.86	3.34	4.05	1.92	5.00	30.19	<.001
-Grammar	3.40	2.74	4.03	1.46	4.85	45.82	<.001
-Vocabulary	3.58	2.99	4.18	1.62	4.98	69.64	<.001
-Communicativeness	3.68	2.88	4.12	2.12	4.98	68.65	<.001

Table 3
Summary of Results According to I.Q. Group *

ENGLISH LANGUAGE TESTS	ABOVE AVERAGE	AVERAGE	BELOW AVERAGE	F VALUE	P VALUE
Reading	52.30	39.62	27.48	11.30	<.001
Spelling	63.18	48.95	44.00	6.26	<.01
Vocabulary	65.68	52.25	44.43	8.66	<.001
<u>FRENCH LANGUAGE TESTS</u>					
Reading	8.87	7.56	5.95	3.77	<
Test de Rend. en Français:					
-raw scores	19.24	13.00	9.56	13.37	<.001
-stanines	4.57	2.95	2.04	13.72	<.001
Test de Rend. en Mathématiques:					
-raw scores	21.39	18.97	13.57	9.63	<.001
-stanines	5.82	5.12	3.38	7.21	<.001
Listening Comprehension	25.46	23.17	18.56	5.32	<.01
Oral Production					
-Comprehension	3.66	3.42	3.33	1.41	>.05
-Pronunciation	3.15	3.04	2.88	.80	>.05
-Grammar	2.72	2.49	2.33	1.79	>.05
-Vocabulary	2.80	2.74	2.60	.54	>.05
-Communicativeness	3.00	2.82	2.12	.84	>.05

* These data represent the averages of the Experimental I, the Experimental II and the English Control Group

Vocabulary

A summary of the average vocabulary scores per School group is presented in Table 2 and per I.Q. group in Table 3.

There was a significant difference between School groups ($F = 7.91$; $df = 3, 197$; $p < .001$) -- as with the reading scores, the Experimental I group ($\bar{x} = 68.49$) and the English Control group ($\bar{x} = 62.65$) scored higher than both the Experimental II group ($\bar{x} = 46.28$) and the de Roberval Immersion group ($\bar{x} = 46.40$). Compared to the February results, there was a slight decline for Experimental I and a very large decline for Experimental II ($\bar{x}$ Feb. = 68.09; $\bar{x}$ June = 46.28). There was virtually no change for the English Control group ($\bar{x}$ Feb. = 63.50; $\bar{x}$ June = 62.65).

There was also a significant difference between the I.Q. groups ($F = 8.66$; $df = 2, 148$; $p < .001$). The rank order from highest to lowest was above average ($\bar{x} = 65.68$), average ($\bar{x} = 52.25$) and below average ($\bar{x} = 44.43$). Again, the June results were generally poorer for all I.Q. groups than the February results (see Appendix 1).

There was no significant sex difference, nor were there any significant interactions.

Spelling

A summary of the average spelling scores per School group is presented in Table 2 and per I.Q. group in Table 3.

There was a significant difference between the School groups ($F = 5.79$; $df = 3, 197$; $p < .001$) -- again, the Experimental I students achieved the highest

score ($\bar{x} = 65.12$), followed by the English Control students ($\bar{x} = 49.70$) and the de Roberval Immersion students ($\bar{x} = 48.50$) and, lastly, the Experimental II students ($\bar{x} = 41.80$).

These results cannot be compared directly to the February results since the former are in percentile form and the latter in raw score form. Furthermore, the February spelling test contained fewer items than the June test (29 versus 32). If, however, the percentile scores are converted back to raw scores and if these raw scores and the February raw scores are expressed as a percentage of total number of items a comparison of the February and June test results is possible. There was no change in performance for the Experimental I students ($\bar{x}_{\text{Feb.}} = 69\%$; $\bar{x}_{\text{June}} = 69\%$); however, the Experimental II students declined from February to June ($\bar{x}_{\text{Feb.}} = 66\%$; $\bar{x}_{\text{June}} = 50\%$), as did the English Control students ($\bar{x}_{\text{Feb.}} = 66\%$; $\bar{x}_{\text{June}} = 56\%$).

There was a significant difference between the I.Q. groups ($F = 6.26$; $df = 2, 148$; $p < .01$)-- The rank order of performance from highest to lowest was above average ($\bar{x} = 63.18$), average ($\bar{x} = 48.95$) and below average ($\bar{x} = 44.00$).

There was also a significant sex difference ($F = 6.54$; $df = 1, 197$; $p < .01$)-- The girls ($\bar{x} = 56.52$) scored higher than the boys ($\bar{x} = 46.04$).

Summary

As expected, there was a high correlation between performance on each test and I.Q. level. There was a general tendency for the students to score lower on the June tests than on the February tests. This decline in performance may be attributable to motivational factors.

On all three tests--- reading, vocabulary and spelling -- the Experimental I students scored highest. They were followed in descending order by the English Control students, the Experimental II students and the de Roberval Immersion students. On two of the three tests (reading and vocabulary) the Experimental II and de Roberval students obtained equivalent scores. On the third test, spelling, de Roberval scored as well as the English Control students and better than the Experimental II students.

In the February testing, the two immersion groups, Experimental I and II, performed as well as or better than, in one instance, the English Control group on these tests. The findings from the June testing suggest that despite a general decrement in performance from February to June, the Experimental I students are holding their own vis à vis the English Control students. The Experimental II students, on the other hand, were lagging behind the English Control students in June, probably as a result of their general decline in performance from February to June. The English Control group changed little from February to June.

It is difficult to explain this pattern of results. Firstly, it cannot be due entirely to I.Q. since all groups, except the de Roberval group, had been equated in terms of I.Q. ab initio. Secondly, it does not seem that it can be explained entirely in terms of language or school program. If French-immersion were the main factor then one would expect all three immersion groups to score at comparable levels. This did not happen -- Experimental group I consistently out-scored the other two immersion groups who were at times comparable (reading and vocabulary) and at other times not comparable (spelling). It is also difficult to fit an interpretation in terms of motivation to these findings in any very systematic and simple way.

French-Language Tests

As in the analysis of the English-language test results two separate sets of analyses had to be performed; one, including all five School groups but ignoring differences in I.Q. within each group; and one, including only the Experimental I, Experimental II and English Control students, but differentiating among students with average, above average and below average I.Q.s. The second analysis provides information about the relationship between level of I.Q. and second language learning.

Therefore, in the first set of analyses six separate two-way analyses of variance were performed on the mean scores from the reading test, the Test de Rendement en Français (raw scores and stanines), the Test de Rendement en Mathématiques (raw scores and stanines) and the listening comprehension test. The analysis of the oral production test will be described later. The main variables were School group (Experimental I, Experimental II, English Control, de Roberval Immersion and French Control) and Sex (male and female). In the second set of analyses six more three-way analyses of variance were performed. In this case the main variables were School group (Experimental I, Experimental II and English Control), I.Q. (above average, average and below average) and Sex (male and female).

Reading

Summaries of the mean reading scores according to School group and I.Q. group are presented in Tables 2 and 3, respectively.

There was a significant difference between the School groups ($F = 7.76$; $df = 4, 226$; $p < .001$) -- the French Control group scored highest ($\bar{x} = 11.60$), followed in descending order by the Experimental I group ($\bar{x} = 9.11$), the de Roberval Immersion group ($\bar{x} = 8.26$), the Experimental II group ($\bar{x} = 7.74$) and the English Control group ($\bar{x} = 5.45$), which scored at chance level.

A comparison of these means with those from the February testing (see Appendix 1) indicates that there was virtually no improvement in reading performance for any of the groups. It is difficult to know if this finding is due to an actual lack of improvement in the students' acquisition of French or to a drop in motivation at the time of the June testing.

There was also a significant difference between the I.Q. groups ($F = 3.77$; $df = 2, 148$; $p < .05$)-- as found previously, the above average group ($\bar{x} = 8.87$) scored higher than either the average group ($\bar{x} = 7.56$) or the below average group ($\bar{x} = 5.95$) which scored lowest.

There was no significant sex difference, nor were there any other significant main effects or interactions.

Test de Rendement en Français (Level VII)

Summaries of the mean raw and stanine scores according to School and I.Q. groupings are presented in Tables 2 and 3, respectively.

There was a significant difference between the School groups for both raw scores ($F = 68.86$; $df = 4,226$; $p < .001$) and stanines ($F = 108.79$; $df = 4,226$; $p < .001$). As in the February results the rank order of raw scores from highest to lowest was French Control ($\bar{x} = 28.92$), Experimental I ($\bar{x} = 19.21$), Experimental II ($\bar{x} = 13.01$) and English Control ($\bar{x} = 9.49$). The de Roberval Immersion group, with an average of 17.76, scored intermediate to the Experimental I and II groups.

In terms of stanine scores both the Experimental I ($\bar{x} = 4.56$) and the de Roberval Immersion group ($\bar{x} = 4.73$) scored in the average range; the Experimental II ($\bar{x} = 2.96$) and the English Control group ($\bar{x} = 2.02$) scored in the below average range; and the French Control group ($\bar{x} = 7.7$) scored in the above average range.

Comparing the June results to the February results reveals that both the Experimental I group and the French Control group improved their performance by one category -- the Experimental I group moved from below average to average; and the French Control group moved from average to above average. Neither the Experimental II group nor the English Control group demonstrated any improvement from February to June -- both remained below average.

There was also a significant difference between the I.Q. groups in both raw scores ($F = 13.37$; $df = 2,148$; $p < .001$) and stanines ($F = 13.72$; $df = 2,148$; $p < .001$). The rank order of mean raw scores from highest to lowest was above average ($\bar{x} = 19.24$), average ($\bar{x} = 13.00$) and below average ($\bar{x} = 9.56$).

There was no significant sex difference, nor were there any other significant main effects or interactions.

Test de Rendement en Mathématiques (Level VII)

Summaries of the mean raw and stanine scores according to School and I.Q. groupings are presented in Tables 2 and 3, respectively.

As in the February results there was a significant difference between the School groups for both raw scores ($F = 10.02$; $df = 4,225$; $p < .001$) and stanines ($F = 13.38$; $df = 4,220$; $p < .001$). Again, the Experimental I students ($\bar{x} = 21.32$) scored higher than the French Control students ($\bar{x} = 19.76$) who in turn scored higher than the Experimental II students ($\bar{x} = 18.93$), the de Roberval Immersion students ($\bar{x} = 18.56$) and the English Control students ($\bar{x} = 13.45$). In terms of stanines, all groups scored in the average range except the English Controls, who scored in the below average range. This is essentially the same pattern as found in the February testing.

There was also a significant difference between the I.Q. groups in both raw scores ($F = 9.63$; $df = 2,148$; $p < .001$) and stanines ($F = 7.21$; $df = 2,148$; $p < .001$). As expected, the rank order of mean raw scores from highest to lowest was above average ($\bar{x} = 21.39$), average ($\bar{x} = 18.97$) and below average ($\bar{x} = 13.57$).

There was a significant sex difference ($F = 3.96$; $df = 1,225$; $p < .05$) -- the boys ($\bar{x} = 19.24$) scored higher than the girls ($\bar{x} = 17.57$). There were no other significant main effects or interactions.

Listening Comprehension

Summaries of the average scores on the listening comprehension test broken

down into School and I.Q. groups are presented in Tables 2 and 3, respectively. Maximum score on this test was 37.

There was a significant difference between the School groups ($F = 16.04$; $df = 4, 225$; $p < .001$). As expected, the French Control group scored highest ($\bar{x} = 33.09$), followed in descending order by the Experimental I group ($\bar{x} = 28.57$), the de Roberval Immersion group ($\bar{x} = 25.52$), the Experimental II group ($\bar{x} = 20.57$) and the English Control group ($\bar{x} = 17.61$).

There was also a significant difference between the I.Q. groups ($F = 5.32$; $df = 2, 147$; $p < .01$). The rank order from highest scoring to lowest scoring group was above average ($\bar{x} = 25.46$), average ($\bar{x} = 23.17$) and below average ($\bar{x} = 18.56$).

There was no significant sex difference, nor were there any other significant main effects on interactions.

Oral Production

Because of the demands of this analysis a sub-sample of the entire sample was selected for evaluation. An approximately equal number of boys and girls, and above average, average and below average I.Q. students were included in each school group. Table 4 presents the actual number of students who participated.

Each student's sample of oral French was rated independently by two native-French speakers along five different dimensions: listening comprehension, pronunciation, grammar, vocabulary and communicativeness. Appendix 3 presents a sample of the rating scales and criteria that were used. A rating of "5" on

a particular dimension represents excellent performance and a rating of "1" represents very poor performance. Summaries of the average ratings per dimension according to school and I.Q. groupings are presented in Tables 2 and 3, respectively.

Table 4

Approximate sample sizes for oral production evaluation

	Above Average		Average		Below Average	
	Male	Female	Male	Female	Male	Female
Experimental I	6	6	6	6	6	6
Experimental II	9	9	6	6	5	6
English Control	6	6	6	6	6	5
French Control de Roberval			Male	Female		
			8	10		
			8	11		

Two separate sets of analyses of variance were performed on the data; one, including all five school groups, but ignoring distinctions in I.Q. level; and one, including only the Experimental I, Experimental II and the English Control groups, but distinguishing among I.Q. levels. In the first set of analyses the main variables were School group (all five groups), Sex (male, female) and Marker (1 and 2). In the second set of analyses the main variables were School group (Experimental I, Experimental II, English Control), I.Q. (above average, average, below average), Sex (male, female) and Marker (1 and 2).

Marker was included in the analyses in order to assess the degree of consistency between the two raters on each dimension. In fact, the analyses indicated that there was very high agreement between the raters on all dimensions.

Consequently, no further mention will be made of this factor.

Listening Comprehension: There was a significant difference between the School groups ($F = 51.05$; $df = 4, 137$; $p < .001$) -- the rank order from highest to lowest mean rating was French Control ($\bar{x} = 5.00$), de Roberval Immersion group ($\bar{x} = 4.80$); Experimental I ($\bar{x} = 4.26$), Experimental II ($\bar{x} = 3.92$) and English Control ($\bar{x} = 2.31$).

There was no significant difference between the I.Q. groups ($F = 1.41$; $df = 2, 45$; $p > .05$) -- the below average ($\bar{x} = 3.33$) and the average groups ($\bar{x} = 3.42$) scored as well as the above average group ($\bar{x} = 3.66$).

There was no significant sex difference, nor were there any other significant main effects or interactions.

Pronunciation: There was a significant difference between the School groups ($F = 30.19$; $df = 4, 8$; $p < .001$) -- the rank order was the same as above for the School group factor.

Again, there was no significant difference between the I.Q. groups ($F = .80$; $df = 2, 48$; $p > .05$) -- the above average ($\bar{x} = 3.15$), average ($\bar{x} = 3.04$) and below average group ($\bar{x} = 2.88$) were all rated approximately equivalent.

There was no significant sex difference, nor were there any other significant main effects or interactions.

Grammar: There was a significant difference between the School groups ($F = 45.82$; $df = 4, 32$; $p < .001$) -- the rank order was as above for the School group factor.

There was no significant difference between the I.Q. groups ($F = 1.79$; $df = 2,65$; $p > .05$)-- the above average ($\bar{x} = 2.72$), average ($\bar{x} = 2.49$) and below average groups ($\bar{x} = 2.33$) were all rated equivalent.

There was no sex difference, nor were there any other significant main effects or interactions.

Vocabulary: There was a significant School group effect ($F = 69.64$; $df = 4,97$; $p < .001$) with the same rank order as above being maintained.

There was no significant difference between the I.Q. groups ($F = .54$; $df = 2,62$; $p > .05$)-- the above average ($\bar{x} = 2.80$), average ($\bar{x} = 2.74$) and below average group ($\bar{x} = 2.60$) were all rated equivalent.

There was no significant sex difference, nor were there any other significant main effects or interactions.

Communicativeness: Again, there was a significant School group effect ($F = 68.65$; $df = 4,86$; $p < .001$) but no significant difference between the I.Q. groups ($F = .84$; $df = 2,75$; $p > .05$). There were no other significant main effects or interactions.

In summary, these findings suggest that proficiency in French varies with the amount of exposure to French. Thus, on all five dimensions the de Roberval group had a slight advantage over the Experimental I students, who in turn were consistently superior to the Experimental II students, and the English Control students scored noticeably lower than all other groups. Even though the Experimental I, Experimental II and de Roberval Immersion groups are all participating in French-immersion programs, the school milieux in which the program is offered

differ in their degree of "Frenchness" with some providing more exposure to the French language than the others. It appears then that the students' proficiency in French reflects to some extent the prevalence of the language in the school at large. This is not unexpected.

On the other hand, proficiency in spoken French, as evaluated here, does not appear to be influenced by level of I.Q. -- the below average and average students were rated equivalent to the above average students on all five dimensions. The failure to find a correlation between I.Q. and proficiency in oral French has been found in two other evaluations, namely, in grade IV and grade XI.

ATTITUDES

Separate analyses of variance were performed to analyze the students' ratings of each concept-- Myself, French Canadian, American and European French person -- on each dimension. There were 18 different dimensions. The main factors in the analyses were School group (Experimental I, Experimental II, English Control and de Roberval Immersion group) and Sex (male, female). Summaries of the dimensions on which there were significant differences either between school groups or between the boys and girls are presented in Tables 5,6,7 and 8 for the concepts Myself, French Canadian, American and European French person, respectively.

There were very few significant differences between the School groups on the concept Myself. The English Control group tended to see themselves as somewhat better looking and cleaner than did the three immersion groups. Otherwise, however, all groups rated themselves in a like fashion on most of the dimensions.

There were more significant differences between the girls and boys on the concept Myself -- the girls tended to see themselves as weaker, less good-looking,

Table 5

Summary of significant differences between School and
Sex groups on their evaluation of the concept

Myself

(A) by school group:

<u>Dimension</u>	<u>Exp'tal I</u>	<u>Exp'tal II</u>	<u>de Roberval</u>	<u>Eng. Control</u>	<u>P</u>
good looking --- ugly	3.58	2.74	3.01	2.44	.0
clean ----- dirty	2.62	1.99	2.06	1.85	.04

(B) by sex:

<u>Dimension</u>	<u>Male Students</u>	<u>Female Students</u>	<u>P</u>
affectionate --- not affectionate	2.61	2.21	.05
weak ----- strong	5.44	5.01	.02
good looking --- ugly	2.53	3.33	.001
calm ----- nervous	2.47	3.27	.001
serious ----- funny	3.78	4.60	.01
severe ----- lenient	4.03	4.50	.05
successful ----- unsuccessful	2.22	2.82	.01

Table 6

Summary of significant differences between School and
Sex groups on their evaluation of the concept

French Canadian

(A) by the school group:

<u>Dimension</u>	<u>Exp'tal</u> <u>I</u>	<u>Exp'tal</u> <u>II</u>	<u>de Roberval</u>	<u>Eng.</u> <u>Control</u>	<u>p</u>
weak ----- strong	4.82	3.83	4.46	3.76	.01
not intelligent --- intelligent	3.88	4.10	4.80	3.59	.01
good looking ----- ugly	4.49	3.84	3.37	4.58	.01
pleasant ----- unpleasant	4.13	3.73	3.54	4.50	.04
interesting ----- boring	4.33	4.10	3.43	4.56	.05
clean ----- dirty	4.51	3.74	3.66	4.52	.05
successful ----- unsuccessful	4.05	3.88	3.27	4.48	.02

(B) by sex:

<u>Dimension</u>	<u>Male</u> <u>Students</u>	<u>Female</u> <u>Students</u>	<u>p</u>
happy ----- sad	3.48	2.90	.03
humble ----- proud	4.42	5.12	.02
interesting ----- boring	4.52	3.69	.01
clean ----- dirty	4.38	3.83	.05
successful ----- unsuccessful	4.19	3.65	.04

Table 7

Summary of significant differences between School and
Sex groups on their evaluation of the concept
European French person

(A) by School group:

<u>Dimension</u>	<u>Exp'tal I</u>	<u>Exp'tal II</u>	<u>de Roberval</u>	<u>Eng. Control</u>	<u>P</u>
friendly----- unfriendly	3.35	3.34	2.42	3.57	.01
good looking----- ugly	3.61	3.67	2.88	3.74	.07
pleasant----- unpleasant	2.87	3.21	2.42	3.58	.01
kind----- mean	2.92	3.10	2.28	3.82	.01
calm----- nervous	3.18	3.60	2.89	3.99	.03
interesting----- boring	3.55	3.59	2.50	4.02	.001
serious----- funny	3.41	3.74	3.09	4.00	.08
successful----- unsuccessful	2.98	3.46	2.87	3.67	.07

(B) by Sex:

<u>Dimension</u>	<u>Male Students</u>	<u>Female Students</u>	<u>P</u>
weak----- strong	3.77	4.74	.01
not intelligent---- intelligent	4.18	5.08	.001
humble----- proud	3.75	4.45	.02
clean----- dirty	3.48	2.68	.01
selfish----- unselfish	4.10	4.59	.06

Table 8

Summary of significant differences between School and
Sex groups on their evaluation of the concept
American

(A) by School group:

<u>Dimension</u>	<u>Exp'tal I</u>	<u>Exp'tal II</u>	<u>de Roberval</u>	<u>Eng. Control</u>	<u>P</u>
not intelligent---- intelligent	4.95	4.94	4.57	3.86	.01
good looking----- ugly	3.70	3.29	2.94	3.97	.02
serious----- funny	3.92	3.35	4.03	3.12	.04

(B) by Sex:

<u>Dimension</u>	<u>Male Students</u>	<u>Female Students</u>	<u>P</u>
happy----- sad	3.08	2.62	.06
humble----- proud	4.12	5.02	.01
serious----- funny	3.28	3.93	.01
selfish----- unselfish	3.72	4.48	.01

less successful and more nervous than did the boys. On the other hand, the girls rated themselves as more affectionate, more funny (as opposed to serious) and more lenient than did the boys.

There were a number of significant differences between the School groups on the concept French Canadian. In general, French Canadians were rated most highly by the de Roberval Immersion group and least highly by the English Control group. The other two immersion groups, Experimental I and II, rated French Canadians intermediately. In summary then the de Roberval Immersion group rated French Canadians as more intelligent, better looking, more pleasant, more interesting, cleaner and more successful than did the English Controls.

Similarly, there was a tendency for the girls to see French Canadians in a more favourable light than did the boys. Thus, the girls rated them significantly happier, prouder, cleaner, more interesting and more successful than did the boys.

The generally favourable attitude toward French Canadian which characterized the de Roberval Immersion group, and the two other immersion groups to a lesser extent, also characterized their ratings of European French people. Thus the immersion groups, and especially the students from the de Roberval immersion class, rated European French people as more friendly, better looking, more pleasant, kinder, more calm, more interesting and more successful than did the English Control students. Again, the girls had more positive attitudes towards this group than did the boys -- the girls rated them as cleaner, prouder, less selfish, stronger and more intelligent than did the boys.

In summary, there are a number of different trends emerging from these results. First of all, the girls, although having a somewhat negative self-evaluation, were generally more favourable than the boys to the ethnic groups

presented for evaluation. Secondly, there were no appreciable differences among the groups on their self-evaluations. Thirdly, however, the immersion groups in general, and the de Roberval group in particular, seemed to be more favourably disposed towards the other three groups presented for evaluation. That the immersion students were more positive toward the two French-speaking groups-- French Canadian and European French -- is perhaps not so surprising in view of their French-language training. What is more surprising are their somewhat more favourable attitudes toward Americans, a group one would not expect to be affected by the French-immersion experience.

It seems that this other-group generosity is associated with the amount of exposure the student has toward both a second-language and speakers of that language. Thus, the de Roberval group demonstrated the most positive attitudes, followed in descending order by the other two immersion groups and, finally, the English Control group.

The findings that have been noted at this grade level with these students were not found at the grade 11 level (see the grade 11 report, 1974). This would suggest that any changes in attitudes induced by the grade 7 French-immersion experience may not be long lasting.

DISCUSSION AND SUMMARY

The findings of this report are generally consistent with those of earlier ones (Polich 1971, 1972) except that in the area of English-language testing, there was a general decline in performance from the February level -- this was most noticeable for the Experimental I and Experimental II groups. As in the February results, the Experimental I students continue to equal or even surpass the English Control students. The Experimental II students, on the other hand, have dropped from a position of parity with the English Control students in

February 1974, to a position of inferiority at the time of the June testing. It is interesting to note that the de Roberval Immersion group tends to perform at the same level as the Experimental II group.

The decline of the two immersion groups may be attributable to their French-immersion experience and its concomitant absence of English-language instruction. It is difficult to account for the relative drops in the Experimental I and II groups since the former included classes from the French-immersion centres where one would expect less English to be used than in the wing-schools of Experimental group II, and, consequently, a relatively large decline in English-language performance. Such was not the case. The interaction of motivational variables with the language variables cannot be ruled out, as was pointed out earlier.

In the area of French-language testing, all three immersion groups scored significantly higher than the English Control group but not as well as the French Control group. There was a general tendency for the Experimental II students to score lower on all of the French tests than either the Experimental I students or the de Roberval Immersion students.

The de Roberval group who attended a French-immersion program in a French school did not score higher than the Experimental I students on the tests of formal language skills -- reading, Test de Rendement en Français and the Test de Rendement en Mathématiques. They did, however, score slightly higher on the oral production test. This extra facility that they have in speaking may come from their increased exposure to French in their school at large, a type of exposure not available to the other immersion groups.

Although there was a significant association between I.Q. level and formal French-language skills, there was no such association between I.Q. and oral

production skills. Thus, the below average students were rated as highly as the above average students on all five dimensions of the oral production evaluation.

Finally, there was an association between school language experience and attitudes toward various ethnolinguistic groups. Those students who had had the most exposure to French and French-speaking people were the most favourable in their rating of French-speaking, as well as non-French speaking ethnic groups. This disposition may not be long lived, however, judging by the performance of a group of immersion students in Grade 11 on an identical questionnaire.

Appendix 1

Summary of English-Language Test Results (February, 1974)

	Exp'tal I	Exp'tal II	Eng. Ctrl.	F. Value	p value
Reading	66.28	50.30	49.33	9.74	<.001
Vocabulary	71.84	68.09	63.50	2.44	.09
Spelling	20.64	19.10	19.56	.65	.52
<u>Writing:</u>					
Spelling	3.26	3.49	3.17	1.70	>.05
Sentence Accuracy	3.10	3.05	2.87	1.30	>.05
Sentence Complexity	3.03	2.98	2.68	4.90	<.05
Organization	2.92	2.74	2.57	3.31	>.05
Originality	2.17	2.03	1.89	2.94	>.05
Overall	3.86	2.92	2.63	3.10	.06
<u>Punctuation:</u>					
Appropriate	63.5%	75.5%	62.5%		
Inappropriate	36.5%	24.5%	37.5%		
<u>Length:</u>					
Appropriate	65.5%	65.5%	43 %		
Inappropriate	34.5%	34.5%	57 %		
<u>Vocabulary:</u>					
Superior	12 %	9.5%	7.5%		
Average	77.5%	80.5%	71.5%		
Below Average	10.5%	10 %	21 %		

Appendix 2

Summary of French-Language Test Results (February, 1974)

	Exp'tal I	Exp'tal II	English Control	French Control	F Value	p Value
Reading	8.96	7.38	5.97	12.09	21.41	<.001
Test de Rend. en Français						
- raw scores	15.32	13.43	9.68	26.36	139.60	<.001
- stanines	3.57	3.17	2.09	6.71	130.31	<.001
Test de Rend. en Math.						
- raw scores	19.86	18.50	13.26	17.91	24.33	<.001
- stanines	5.4	5.0	3.3	4.8	24.18	<.001
<u>Writing</u>						
Vocabulary	2.71	2.53	1.66	4.02	17.33	<.01
Sentence Accuracy	2.60	2.47	1.70	3.52	101.42	<.001
Spelling I	2.23	2.23	1.60	2.64	61.36	<.01
Spelling II	2.03	2.02	1.50	2.1	5.65	<.01
Organization	2.63	2.48	1.95	3.48	40.44	<.01
Overall	2.53	2.40	1.69	3.31	35.93	<.01

APPENDIX 3

EVALUATION DE LA PRODUCTION ORALE EN FRANCAIS

PRINTEMPS 1974

INITIALES DU CORRECTEUR _____

NOM _____

ANNEE _____

A) Compréhension générale pendant la conversation

Comprend tout	5
Très peu de répétition nécessaire pour la compréhension	4
A besoin qu'on répète certaines questions pour bien comprendre	3
A besoin que quelques phrases soient traduites en anglais pour comprendre	2
A besoin que la plupart des questions soient traduites en anglais pour comprendre	1

B) Prononciation

Prononce comme si le français est sa langue maternelle	5
Quelques mots sont mal prononcés, mais la communication ne s'en trouve pas affectée	4
Prononciation inconsistante, menant parfois à des contresens.	3
Graves défauts de prononciation. La communication s'en trouve très affectée	2
Elocution très difficile à comprendre. Communication gravement affectée	1
Ne parle pas assez pour pouvoir être évalué	0

C) Grammaire et Syntaxe

Pas d'erreur de grammaire ni de syntaxe. Connaissance convenable de la grammaire et de la syntaxe	5
Erreurs grammaticales ou syntaxiques occasionnelles	4
De nombreuses erreurs de grammaire et de syntaxe amenant un langage parfois obscur	3
Grammaire et syntaxe très insuffisantes. Langage souvent incompréhensible	2
Elocution difficile à comprendre. De trop nombreuses erreurs graves	1
Ne parle pas assez pour pouvoir être évalué	0

D) Vocabulaire

Vocabulaire équivalent à celui d'un francophone de son âge	5
Quelques erreurs: En général, vocabulaire suffisant. Rare mot anglais ou anglicismes	4
Vocabulaire assez simple, mais quand même suffisant. Parfois un mot anglais ou un anglicisme	3
Le mauvais mot trop souvent. Beaucoup de mots anglais et d'anglicismes	2
Malentendus à cause de ce manque de vocabulaire	1
Vocabulaire insuffisant pour pouvoir s'exprimer	0
Ne parle pas assez pour pouvoir être évalué	0

E) Communication

Facilité d'expression et désir de communiquer en français: supérieurs	5
Facilité d'expression et désir de communiquer en français: au dessus de la moyenne	4
Facilité d'expression et désir de communiquer en français: moyens	3
Facilité d'expression et désir de communiquer en français: inférieurs à la moyenne	2
Refus de s'exprimer en français	1